## AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 <u>et seq</u>.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

## JPS Elastomerics – Stevens Urethane

is authorized to discharge from the facility located at

# JPS Elastomerics – Stevens Urethane 412 Main Street - Route 10 Easthampton, MA 01027

to the receiving water(s) named

## Wetland adjacent to Wilton Brook (MA34-15)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the first day of the calendar month immediately following sixty (60) days after signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on September 7, 2004.

This permit consists of 13 pages in Part I including effluent limitations, monitoring requirements, and state permit conditions; Attachment A, Freshwater Acute and Chronic Toxicity Test Procedure and Protocol; and 25 pages in Part II including Standard Conditions.

Signed this 25th day of October, 2010

## /S/SIGNATURE OF FILE

Stephen S. Perkins, Director Office of Ecosystem Protection Environmental Protection Agency Boston, MA David Ferris, Director Massachusetts Wastewater Management Program Department of Environmental Protection Commowealth of Massachusetts Boston, MA

# PART I

# A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge **contact cooling water** from **Outfall 001A** to the wetland adjacent to Wilton Brook. Such discharges shall be limited and monitored by the permittee as specified below.

		Discharge	Limitation <sup>2</sup>	Monitoring	Requirement <sup>1</sup>
Effluent Characteristic	Units	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow	GPD	Report	50	Daily when discharging	Estimate
pH <sup>3</sup>	SU	6.5-8.3 range (S Pag		1 / Month	Grab
Temperature	F	83°F	83°F	1 / Week	Grab
TSS⁴		13 mg/l 0.0018 lb/day	13 mg/l 0.0018 lb/day	1 / Month	Grab
BOD⁴		18 mg/l 0.0025 lb/day	18 mg/l 0.0025 lb/day	1 / Month	Grab
Oil and Grease <sup>4</sup>		15 mg/l 0.0021 lb/day	15 mg/l 0.0021 lb/day	1 / Month	Grab
Chlorine, Total Residual	mg/l	0.011	0.019	1 / Month	Grab
Dissolved Oxygen	mg/l	****	Report	1 / Quarter⁵	Grab
Trichloroethylene	ug/l	****	Report	1 / Year	Grab
bis (2-ethylhexyl) phthalate	µg/l	****	Report	1 / Year	Grab

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Part I.A.1, Continued

Effluent Characteristic	Units	Discharge Limitation <sup>2</sup>	Monitoring Requirement <sup>1</sup>		
		Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (WET) <sup>6,9</sup>					
$LC_{50}^{7}$	%	****	≥100%	1 / Year	Composite
C-NOEC <sup>8</sup>	%	****	≥100%	1 / Year	Composite
Hardness	mg/L	****	Report	1 / Year	Composite
Alkalinity	mg/L	****	Report	1 / Year	Composite
рН	SU	****	Report	1 / Year	Grab
Specific Conductance	umhos/cm	****	Report	1 / Year	Composite
Total Solids	mg/L	****	Report	1 / Year	Composite
Ammonia	mg/L	****	Report	1 / Year	Composite
Total Organic Carbon	mg/L	****	Report	1 / Year	Composite
Total Residual Chlorine	mg/L	****	Report	1 / Year	Grab
Dissolved Oxygen	mg/L	****	Report	1 / Year	Composite
Total Cadmium	mg/L	****	Report	1 / Year	Composite
Total Chromium	mg/L	****	Report	1 / Year	Composite
Total Lead	mg/L	****	Report	1 / Year	Composite
Total Copper	mg/L	****	Report	1 / Year	Composite
Total Zinc	mg/L	****	Report	1 / Year	Composite
Total Nickel	mg/L	****	Report	1 / Year	Composite
Total Aluminum	mg/L	****	Report	1 / Year	Composite
Total Magnesium	mg/L	****	Report	1 / Year	Composite
Total Calcium	mg/L	****	Report	1 / Year	Composite

See page 5-6 for explanation of footnotes

## **Permit No. MA0001503** Page 4 of 13

# PART I.A. (continued)

2. Wet Weather Monitoring. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge storm water, uncontaminated air conditioner condensate, and uncontaminated groundwater from Outfall 001B to the wetland adjacent to Wilton Brook. Such discharges shall be limited and monitored by the permittee as specified below.

Effluent	Unite	Discharge	e Limitation	Monitoring Requirement <sup>1,10</sup>		
Characteristic	Units	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	
Flow	GPD	Report	Report	1 / Quarter⁵	Estimate	
pH <sup>3</sup>	S.U.	6.5-8.3 range (See	Part I.A.3.b Page 7)	1 / Quarter⁵	Grab	
TSS	mg/l	Report	Report	1 / Quarter <sup>5</sup>	Grab	

See page 5-6 for explanation of footnotes

Footnotes:

1. Samples of the following discharges, taken in compliance with the monitoring requirements specified above, shall be taken at the following locations:

<u>Contact Cooling Water (I.A.1)</u> – At the discharge point to the wetland adjacent to Wilton Brook during dry weather conditions (see Footnote 10).

<u>Stormwater/Uncontaminated Air Conditioner Condensate/ Uncontaminated Groundwater</u> (I.A.2) – At the discharge point to the wetland adjacent to Wilton Brook during wet weather conditions (see Footnote 10), and when contact cooling water is not being discharged.

If one or more of the above discharges does not occur during a reporting period, the 'no discharge' box shall be checked on the appropriate DMR and submitted to EPA and MassDEP.

- 2. Sample results at or below the minimum level shall be reported as zero ("0") on the discharge monitoring report.
- 3. Required for State Certification
- 4. Mass based results shall be calculated by multiplying the measured concentration of a given pollutant by the total measured flow for that day, as follows:

Mass (lbs/day) = Concentration (mg/l) \* Total flow (gpd) \*  $\frac{1 \text{ pound}}{453,592.37 \text{ mg}}$  \*  $\frac{3.785 \text{ liters}}{1 \text{ gallon}}$ 

- 5. For samples with a monitoring frequency of once (1) per quarter, "quarters" are defined as the interval of time between the months of: January through March, inclusive; April through June, inclusive; July through September, inclusive; and October through December, inclusive.
- 6. The permittee shall conduct one chronic (and modified acute) toxicity test per year using the daphnid, <u>Ceriodaphnia dubia</u>, only. The chronic test may be used to calculate the LC<sub>50</sub> at the 48 hour exposure interval. Toxicity test samples shall be collected during the month of September and the test results shall be submitted by the last day of the month following the completion of the test. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Month	Submit Results By:	Test Species	Acute Limit LC <sub>50</sub>	Chronic Limit C- NOEC
September	October 31 <sup>th</sup>	Daphnid See Attachment A	≥100%	≥100%

- 7. The  $LC_{50}$  is defined as the concentration of effluent that caused mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.
- 8. C-NOEC (chronic-no observed effect concentration) is defined as the highest concentration of effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the test results exhibit a linear dose response relationship. However, where the test results do not exhibit a linear dose-response relationship, the permittee must report the lowest concentration where there is no observable effect. The "100 % or greater" limit is defined as a sample which is composed of 100% effluent. This is a maximum daily limit derived as a percentage of the inverse of the dilution factor of 1.0.
- 9. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment A**, Section IV., DILUTION WATER in order to obtain permission to use alternate dilution water.

In lieu of individual approvals for alternate dilution water required in **Attachment A**, EPA-New England has developed a <u>Self-Implementing Alternative Dilution Water Guidance</u> document (called "Guidance Document") which may be used to obtain automatic approval of alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" is included in Attachment G of the *NPDES Permit Program Instructions for the Discharge Monitoring (DMR) Forms* available at <u>http://www.epa.gov/region1/enforcementandassistance/dmr.html</u> and is not intended as a direct attachment to this permit.

10. All wet weather samples shall be collected from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. All wet weather samples are to be grab samples taken within thirty (30) minutes of the initiation of the discharge from the outfall(s) where practicable, but in no case later than within the first hour of discharge from the outfall(s). When adverse climatic conditions preclude the ability to sample, the permittee shall submit a report citing the conditions which prevented sampling. For further guidance, see *NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001, July 1992.* 

# Part I.A (continued)

- 3.
- a. The discharge either individually or in combination shall not cause a violation of the water quality standards of the receiving waters.
- b. The pH of the effluent shall be neither less than 6.5 nor greater than 8.3 at any time, unless these values are exceeded due to natural causes and the discharge shall not be more than 0.5 s.u. outside of the background conditions.
- c. The discharge shall not cause an objectionable discoloration of the receiving waters.
- d. The effluent shall contain neither visible oil sheen, foam, nor floating solids at any time.
- e. The rise in receiving water temperature due to the discharge shall not exceed 5°F. Upon request by EPA and/or MassDEP, the permittee shall collect in-stream temperature samples from the receiving water to calculate the rise in temperature.
- f. The discharges shall not contain materials in concentrations or combinations which are hazardous or toxic to human health, aquatic life of the receiving water or which would impair the uses designated by its classification.
- g. The discharges shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.
- h. Notwithstanding specific conditions of this permit, the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.
- i. The results of sampling for any parameter above its required frequency must also be reported, in accordance with 40 CFR § 122.41(l)(4)(ii).
- j. EPA may modify this permit in accordance with EPA regulations in 40 CFR §122.62 and §122.63 to incorporate more stringent effluent limitations, increase the frequency of analyses, or impose additional sampling and analytical requirements.
- 4. This permit shall be modified, or revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
  - a. contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
  - b. controls any pollutant not limited by this permit.

If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the Act.

- 5. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR §122.42):
  - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - (i) One hundred micrograms per liter  $(100 \mu g/l)$ ;
    - (ii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
    - (iii) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
  - b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - (i) Five hundred micrograms per liter (500  $\mu$ g/l);
    - (ii) One milligram per liter (1 mg/l) for antimony;
    - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
    - (iv) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
  - c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- 6. Toxics Control
  - a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
  - b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

7. Numerical Effluent Limitations for Toxicants

EPA or MassDEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

# **B. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)**

- 1. The permittee shall develop, implement, and maintain a Stormwater Pollution Prevention Plan (SWPPP) designed to reduce, or prevent, the discharge of pollutants in stormwater to the receiving waters identified in this permit. The SWPPP shall be a written document that is consistent with the terms of this permit. Additionally, the SWPPP shall serve as a tool to document the permittee's compliance with the terms of this permit. Development guidance and a recommended format for the SWPPP are available on the EPA website for the Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activities (http://cfpub.epa.gov/npdes/stormwater/msgp.cfm).
- 2. The SWPPP shall be completed or updated and certified by the permittee within 90 days after the effective date of this permit. The permittee shall certify that its SWPPP has been completed or updated shall be signed in accordance with the requirements identified in 40 CFR §122.22. A copy of this initial certification shall be sent to EPA and MassDEP within one hundred and twenty (120) days of the effective date of this permit.
- 3. The SWPPP shall be prepared in accordance with good engineering practices and shall be consistent with the general provisions for SWPPPs included in the most current version of the MSGP. In the current MSGP (effective May 27, 2009) the general SWPPP provisions are included in Part 5. Specifically, the SWPPP shall document the selection, design, and installation of control measures and contain the elements listed below:
  - a. A pollution prevention team with collective and individual responsibilities for developing, implementing, maintaining, revising and ensuring compliance with the SWPPP.
  - b. A site description which includes the activities at the facility; a general location map showing the facility, receiving waters, and outfall locations; and a site map showing the extent of significant structures and impervious surfaces, directions of stormwater flows, and locations of all existing structural control measures, stormwater conveyances, pollutant sources (identified in Part 3.c. below), stormwater monitoring points, stormwater inlets and outlets, and industrial activities exposed to precipitation such as, storage, disposal, material handling.
  - c. A summary of all pollutant sources which includes a list of activities exposed to stormwater, the pollutants associated with these activities, a description of where spills have occurred or could occur, a description of non-stormwater discharges, and a summary of any existing stormwater discharge sampling data.

- d. A description of all stormwater controls, both structural and non-structural.
- e. A schedule and procedure for implementation and maintenance of the control measures described above and for the quarterly inspections and best management practices (BMPs) described below.
- f. Sector specific SWPPP provisions included in Sector Y- Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries of the MSGP.
- 4. The SWPPP shall document the appropriate best management practices (BMPs) implemented or to be implemented at the facility to minimize the discharge of pollutants in stormwater to waters of the United States and satisfy the non--numeric technology-based effluent limitations included in this permit. At a minimum, these BMPs shall be consistent with the control measures described in the most current version of the MSGP. In the current MSGP, these control measures are described in Part 2.1.2 and Part 8.Y. Specifically, BMPs must be selected and implemented to satisfy the following non-numeric technology-based effluent limitations:
  - a. Minimizing exposure of manufacturing, processing, and material storage areas to stormwater discharges.
  - b. Good housekeeping measures, including routine cleaning of catch basins, designed to maintain areas that are potential sources of pollutants.
  - c. Preventative maintenance programs to avoid leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters.
  - d. Spill prevention and response procedures to ensure effective response to spills and leaks if or when they occur.
  - e. Erosion and sediment controls designed to stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants.
  - f. Runoff management practices to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff.
  - g. Proper handling procedures for salt or materials containing chlorides that are used for snow and ice control.
  - h. Sector specific BMPs included in Sector Y- Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries.
  - i. Preventative measures to avoid the discharge of solids, including plastic pellets and resins.
- 5. All areas with industrial materials or activities exposed to stormwater and all structural control used to comply with effluent limits in this permit shall be inspected, at least once per quarter, by qualified personnel with one or more members of the stormwater pollution prevention team. Inspections shall begin during the 1<sup>st</sup> full quarter after the effective date of this permit. EPA considers quarters as follows: January to March; April to June; July to September; and October to December. Each inspection must include a visual assessment of stormwater samples (from each outfall), which shall be collected within the first 30 minutes of discharge from a storm event, stored in a clean, clear glass or plastic container, and examined in a well-lit area for the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators

of pollution. The permittee shall document the following information for each inspection and maintain the records along with the SWPPP:

- a. The date and time of the inspection and at which any samples were collected;
- b. The name(s) and signature(s) of the inspector(s)/sample collector(s);
- c. If applicable, why it was not possible to take samples within the first 30 minutes;
- d. Weather information and a description of any discharges occurring at the time of the inspection;
- e. Results of observations of stormwater discharges, including any observed discharges of pollutants and the probable sources of those pollutants;
- f. Any control measures needing maintenance, repairs or replacement; and,
- g. Any additional control measures needed to comply with the permit requirements.
- 6. The permittee shall amend and update the SWPPP within 14 days of any changes at the facility that result in a significant effect on the potential for the discharge of pollutants to the waters of the United States. Such changes may include, but are not limited to: a change in design, construction, operation, or maintenance, materials storage, or activities at the facility; a release of a reportable quantity of pollutants as described in 40 CFR §302; or a determination by the permittee or EPA that the BMPs included in the SWPPP appear to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with industrial activity.
- 7. Any amended, modified, or new versions of the SWPPP shall be re-certified and signed by the permittee in accordance with the requirements identified in 40 CFR §122.22. The permittee shall also certify, at least annually, that the previous year's inspections and maintenance activities were conducted, results recorded, records maintained, and that the facility is in compliance with this permit. If the facility is not in compliance with any aspect of this permit, the annual certification shall state the non-compliance and the remedies which are being undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in 40 CFR §122.22. The permittee shall maintain at the facility a copy of its current SWPPP and all SWPPP certifications (the initial certification, recertifications, and annual certifications) signed during the effective period of this permit, and shall make these available for inspection by EPA and MassDEP. In addition, the permittee shall document in the SWPPP any violation of numerical or non-numerical stormwater effluent limits with a date and description of the corrective actions taken.

# C. UNAUTHORIZED DISCHARGES

This permit authorizes the permittee to discharge only in accordance with the terms and conditions of this permit and only from the outfall listed in Part I.A.1-I.A.2 of this permit. Discharges of wastewater from any other point sources which are not authorized by this permit or other NPDES permits shall be reported in accordance with Section D.1.e. (1) of Part II – Standard Conditions of this permit (Twenty-four hour reporting).

## **D. MONITORING AND REPORTING**

Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the following month. Other monitoring results shall be submitted as required by this permit.

Signed and dated originals of these, and all other reports required herein, with the exception of WET tests results for the Springfield MassDEP office, shall be submitted to the Director and the State at the following addresses:

U.S. Environmental Protection Agency Water Technical Unit (SMR-04) 5 Post Office Square - Suite 100 Boston, MA 02109-3912

Massachusetts Department of Environmental Protection Bureau of Waste Prevention Western Regional Office 436 Dwight Street Springfield, MA 01608

In addition, copies of all Discharge Monitoring Reports and whole effluent toxicity test results shall also be submitted to the State at the following address:

Massachusetts Department of Environmental Protection Division of Watershed Management Surface Water Discharge Permit Program 627 Main Street, 2<sup>nd</sup> Floor Worcester, MA 01608

# **E. STATE PERMIT CONDITIONS**

This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and 314 C.M.R. 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.

This authorization also incorporates the state water quality certification issued by MassDEP under § 401(a) of the Federal Clean Water Act, 40 C.F.R. 124.53, M.G.L. c. 21, § 27 and 314 CMR 3.07. All of the requirements (if any) contained in MassDEP's water quality certification

for the permit are hereby incorporated by reference into this state surface water discharge permit as special conditions pursuant to 314 CMR 3.11.

Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY NEW ENGLAND - REGION I 5 POST OFFICE SQUARE BOSTON, MA 02109-3912

#### FACT SHEET

# DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES PURSUANT TO THE CLEAN WATER ACT (CWA)

NPDES PERMIT NUMBER: MA0001503

PUBLIC NOTICE START AND END DATES:

NAME AND MAILING ADDRESS OF APPLICANT:

# JPS Elastomerics - Stevens Urethane 412 Main Street - Route 10 Easthampton, MA 01027

#### NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

## JPS Elastomerics - Stevens Urethane 412 Main Street – Route 10 Easthampton, MA 01027

RECEIVING WATER(S): Wetland adjacent to Wilton Brook (Connecticut River Basin, MA-34-15)

RECEIVING WATER CLASSIFICATION(S): B (warm water fishery)

SIC CODE: 3081 Unsupported Plastic

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ATTACHMENT C – Mass Based Limit Calculations

# I. Proposed Action, Type of Facility, and Discharge Location

The above applicant has applied to the U.S. Environmental Protection Agency (EPA) for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit to discharge into the designated receiving water. The Current Permit was signed September 7, 2004 and became effective 60 days from the date of signature. This permit expired October 31, 2009. EPA received a permit renewal application from JPS Elastomerics – Stevens Urethane ("JPS") dated August 4, 2008. Since the permit renewal application was deemed timely and complete by EPA, the permit has been administratively continued.

JPS, which is located in Easthampton, MA, manufactures thermoplastic polyurethane films, sheets, and tubing. The facility discharges contact cooling water though Outfall 001 to a wetland adjacent to the Wilton Brook, which is a tributary of the Connecticut River. Additional contributing flows include storm water and air conditioner condensate. For a map of the site and outfall location, refer to Attachment A.

## II. Description of Discharge

A quantitative description of the discharge in terms of significant effluent parameters based on the permit application and in terms of recent effluent monitoring data from January 2005 through September 2009 was reviewed and used in the development of the draft NPDES permit (Draft Permit). A summary of the quantitative description is provided in the Discharge Monitoring Report (DMR) provided as Attachment B of this fact sheet.

## III. Receiving Water Description

JPS discharges to a wetland adjacent to the Wilton Brook (MA34-15), which flows into the Connecticut River. The Wilton Brook is classified as a Class B warm water fishery by the Massachusetts Department of Environmental Protection (MassDEP). The Massachusetts Surface Water Quality Standards, 314 Code of Massachusetts Regulations ("CMR") 4.05(4) (b) states that Class B waters have the following designated uses: *These waters are designated as habitat* for fish, other aquatic life and wildlife and for primary and secondary contact recreation. In approved areas they shall be suitable as a source of public water supply with appropriate treatment ("Treated Water Supply"). These waters shall be suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses. These waters shall have consistently good aesthetic value.

Section 303(d) of the Federal Clean Water Act (CWA) requires states to identify those waterbodies that are not expected to meet surface water quality standards after the implementation of technology-based controls and, as such, require the development of total maximum daily loads (TMDL). The Massachusetts final 2008 303(d) report states that Wilton Brook (MA34-15), from the headwaters in Easthampton, to outlet Rubber Thread Pond (formerly segment MA34105) in Easthampton, is impaired for non-native aquatic plants and aquatic plants (Macrophytes). Based on the composition of the discharges from JPS (see Attachment B), the discharge from JPS is not expected to contribute to these impairments.

## IV. Limitations and Conditions

The effluent limitations of the draft permit, the monitoring requirements, and any implementation schedule (if required) may be found in the draft permit.

## V. Permit Basis: Statutory and Regulatory Authority

The Clean Water Act (CWA) prohibits the discharge of pollutants to waters of the United States without a NPDES permit unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology and water quality-based effluent limitations and other requirements including monitoring and reporting. This Draft NPDES permit was developed in accordance with various statutory and regulatory requirements established pursuant to the CWA and applicable State regulations. During development, EPA considered the most recent technology-based treatment requirements, water quality-based requirements, and all limitations and requirements in the Current Permit. The regulations governing the EPA NPDES permit program are generally found at 40 CFR Parts 122, 124, 125, and 136. The standard conditions of the Draft Permit are based on 40 CFR §122.41 and consist primarily of management requirements common to all permits. The effluent monitoring requirements have been established to yield data representative of the discharge under authority of Section 308(a) of the CWA in accordance with 40 CFR §122.41(j), §122.44(i) and §122.48.

## A. Technology-Based Requirements

Subpart A of 40 CFR §125 establishes criteria and standards for the imposition of technology based treatment requirements in permits under Section 301(b) of the CWA, including the application of EPA promulgated effluent limitations and case-by-case determinations of effluent limitations under Section 402(a)(1) of the CWA.

Technology-based treatment requirements represent the minimum level of control that must be imposed under Sections 301(b) and 402 of the CWA (See 40 CFR §125 Subpart A) to meet best practicable control technology currently available (BPT) for conventional pollutants and some metals, best conventional control technology (BCT) for conventional pollutants, and best available technology economically achievable (BAT) for toxic and non-conventional pollutants. In general, technology-based effluent guidelines for non-POTW facilities must be complied with as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989 [See 40 CFR §125.3(a)(2)]. Compliance schedules and deadlines not in accordance with the statutory provisions of the CWA cannot be authorized by a NPDES permit.

On December 17, 1984, EPA promulgated technology-based National Effluent Limitation Guidelines (ELGs) for the Plastics Molding and Forming Point Source category at 40 CFR Part 463. Subpart A – Contact Cooling and Heating Water Subcategory, applies to the discharge of contact cooling water from JPS. The promulgated ELGs contain numerical effluent limitations on the discharge of biochemical oxygen demand (BOD – a daily maximum of 26 mg/l), oil and

grease (a daily maximum of 29 mg/l), total suspended solids (TSS – a daily maximum of 19 mg/l), and pH (6-9 standard units). The ELGs also require that the concentration based limits in the regulations be converted to mass based limits to assure that the company does not use dilution as a means of treatment. The mass based limits are calculated by multiplying the "average process water usage flow rate" (APWUF) for the contact cooling water times the concentration based limits. The APWUF is equal to the volume of process water used per year by a process divided by the number of days per year the process operates. The facility reported that 500 gallons of process water are used per month, or 6000 gallons per year, and the facility operates 365 days per year. Therefore, the APWUF is approximately 16.5 gallons per day (GPD).

## B. Water Quality-Based Requirements

Water quality-based criteria are required in NPDES permits when EPA and the State determine that effluent limits more stringent than technology-based limits are necessary to maintain or achieve state or federal water-quality standards (See Section 301(b) (1)(C) of the CWA). Water quality-based criteria consist of three (3) parts: 1) beneficial designated uses for a water body or a segment of a water body; 2) numeric and/or narrative water quality criteria sufficient to protect the assigned designated use(s) of the water body; and 3) anti-degradation requirements to ensure that once a use is attained it will not be degraded. The Massachusetts State Water Quality Standards, found at 314 CMR 4.00, include these elements. The State Water Quality Regulations limit or prohibit discharges of pollutants to surface waters and thereby assure that the surface water quality standards of the receiving water are protected, maintained, and/or attained. These standards also include requirements for the regulation and control of toxic constituents and require that EPA criteria, established pursuant to Section 304(a) of the CWA, be used unless site-specific criteria are established. EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 CFR §122.44(d).

Section 101(a)(3) of the CWA specifically prohibits the discharge of toxic pollutants in toxic amounts. The Commonwealth of Massachusetts has similar narrative criteria in their water quality regulations that prohibits such discharges [See Massachusetts 314 CMR 4.05(5)(e)]. The effluent limits established in the Draft Permit assure that the surface water quality standards of the receiving water are protected, maintained, and/or attained.

## C. Anti-Backsliding

EPA's anti-backsliding provision as identified in Section 402(o) of the Clean Water Act and at 40 CFR §122.44(l) prohibits the relaxation of permit limits, standards, and conditions unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued. Anti-backsliding provisions apply to effluent limits based on technology, water quality, best professional judgment (BPJ) and State Certification requirements. Relief from anti-backsliding provisions can only be granted under one of the defined exceptions [See 40 CFR §122.44(l)(2)(i)].

#### D. Anti-Degradation

Federal regulations found at 40 CFR Part 131.12 require states to develop and adopt a statewide antidegradation policy which maintains and protects existing instream water uses and the level of water quality necessary to protect the existing uses, and maintains the quality of waters which exceed levels necessary to support propagation of fish, shellfish, and wildlife and to support recreation in and on the water. The Massachusetts Antidegradation Regulations are found at 314 CMR 4.04.

The EPA anticipates that the MassDEP shall make a determination that there shall be no significant adverse impacts to the receiving waters and no loss of existing uses as a result of the discharge authorized by this permit. This Draft Permit is being reissued with allowable effluent limits as stringent as or more stringent than the Current Permit and accordingly will continue to protect the existing uses of Wilton Brook.

## VI. Explanation of the Permit's Effluent Limitation(s)

## A. Facility Information

JPS Elastomerics – Stevens Urethane is a manufacturer of thermoplastic polyurethane tubing, sheets, and films. A closed-cycle non-contact cooling water (NCCW) system comprised of a 50/50 mixture of water and antifreeze is used to cool the five sheet lines and two blown film lines at the facility. NCCW is also used to cool portions of the Beringer reclaim process and the two tubing lines. The NCCW system does not discharge to the wetland adjacent to Wilton Brook. The Current Permit authorized the discharge of NCCW, however, the Draft Permit does not authorize the discharge of NCCW because the facility has modified its contingency plan and will discharge NCCW to the sewer. In addition, according to the facility, a discharge of NCCW has not occurred since the late 1990's.

Contact cooling water systems are used for cooling additional portions of the two tubing lines and the Beringer reclaim process. These systems operate four to five days a week, and only discharge to the wetland adjacent to Wilton Brook at the end of an operating period. Discharges of contact cooling water exit the plant and flow through a weir before commingling with storm water discharges (if present) and discharging through Outfall 001. The purpose of the weir is to reduce the flow from the facility, and remove solids from the discharge; however, plastic pellets were visible in both the weir and the receiving water during the site visit conducted by EPA in May 2009. According to JPS, solids are removed from the weir once every spring. Municipal water is the source of all contact and non-contact cooling water.

Floor drains are located throughout the facility and are connected to Outfall 001; however, the facility states that only "dry" cleaning is conducted inside the plant. All chemicals are stored either in the chemical storage building, which is attached to the main plant, or a metal storage shed, which is located behind the plant. According to JPS, a spill of any chemicals in the chemical storage building would collect in the catch basin under the floor of the chemical storage building and be disposed of off-site. A spill in the metal storage shed would collect in drain pans

underneath the chemical storage drums, and, in the event a spill occurred on the concrete floor, JPS states that a spill kit is available for clean-up and containment.

Storm water run-off from roof drains, the parking lot, and grassy areas is collected on-site by several catch basins, which discharge through Outfall 001. According to the facility, raw materials and final products are not stored outside. However, empty wooden pallets, scrap metal, and left over rolls of scrap plastic are stored outside and do come into contact with storm water discharges. The facility states that it does not currently clean the storm water catch basins. Air conditioner condensate collects from the facility air conditioners and mixes with the facility storm water for discharge through Outfall 001.

### B. Permitted Outfalls

The Draft Permit authorizes the discharge of contact cooling water, storm water, uncontaminated groundwater, and air conditioner condensate through Outfall 001 (see Attachment A). The Draft Permit designates Outfall 001A for discharge contact cooling water through Outfall 001. Outfall 001B is designated for discharges of stormwater as well as uncontaminated groundwater and air conditioner condensate, which in addition to being authorized in this draft permit, are also both allowable non-stormwater discharges authorized by EPA's NPDES Storm Water Multi-Sector General Permit for Industrial Activities (MSGP).

The facility has noted that a flow exists at Outfall 001 even during dry weather conditions and when no flow is present at the weir. This flow has been attributed to groundwater infiltration and residual storm water. The Draft Permit requires that samples of contact cooling water be collected at the weir, prior to commingling with residual storm water discharges (001A). Wet weather stormwater samples are required to be collected end-of-pipe, at times when contact cooling water is not being discharged (001B). The sampling locations and times included in the Draft Permit for the contact cooling water, stormwater, air conditioner condensate, and groundwater are expected to produce results that are representative of each discharge.

Outfall 001 empties into a wetland area before reaching Wilton Brook. According to the facility, this wetland was created by original plant flows of 114,000 - 149,000 gpd of NCCW. The flow in Wilton Brook is intermittent and the receiving water provides no dilution to the discharge from the facility. Ultimately, Wilton Brook discharges to the Connecticut River.

## C. Derivation of Effluent Limits under the Federal CWA and/or the Commonwealth of Massachusetts' Water Quality Standards

The Draft Permit for JPS includes numeric effluent limitations and requires the development, implementation, and annual review of a Stormwater Pollution Prevention Plan (SWPPP) prepared for the facility. The effluent parameters in the Draft Permit are discussed in more detail below.

#### 1. Flow

The Draft Permit contains a maximum daily flow limit at outfall 001A of 50 gallons per day (GPD) for contact cooling water, which is based on information included in the permittee's application. As mentioned in Part B "Permitted Outfalls," the Draft Permit requires samples of contact cooling water as well as flow measurements to be collected at the weir, prior to comingling with residual storm water discharges.

## <u>2. pH</u>

Massachusetts State Surface Water Quality Standards require the pH of Class B waters to be within the range of 6.5 to 8.3 standard units (s.u.) and not more than 0.5 units outside of the natural background range. The pH permit limit range of 6.5 to 8.3 s.u. as identified in the Draft Permit, has been established in accordance with the State Surface Water Quality Standards, which are more stringent than the technology-based ELGs at 40 CFR §463. The discharge shall not exceed this pH range unless due to natural causes. In addition, there shall be no change from background conditions that would impair any uses assigned to the receiving water class. A summary of the discharge monitoring data submitted by the facility is included as Attachment B to this Fact Sheet.

#### 3. Total Suspended Solids (TSS)

The Draft Permit contains a daily maximum and a monthly average concentration based limit of 13 milligrams per liter (mg/l) continued from the Current Permit based on anti-backsliding. Additionally, the Draft Permit contains a daily maximum and a monthly average mass-based limit of 0.0018 pounds per day (lb/day). The concentration based limit is continued from the Current Permit and is more stringent than the technology based ELGs at 40 CFR §463. Pursuant to the ELGs, the mass based limits are calculated by multiplying the APWUF times the concentration based limit (see Attachment C).

#### 4. Biochemical Oxygen Demand (BOD)

The Draft Permit contains a daily maximum and a monthly average concentration based limit of 18 mg/l continued from the Current Permit based on anti-backsliding. Additionally, the Draft Permit contains a daily maximum and a monthly average mass-based limit of 0.0025 lb/day. The concentration based limit is continued from the Current Permit and is more stringent than the technology-based ELGs at 40 CFR §463. Pursuant to the ELGs, the mass based limits are calculated by multiplying the APWUF times the concentration based limit (see Attachment C).

#### 5. Oil and Grease (O&G)

The Draft Permit contains a daily maximum limit of 15 mg/l continued from the Current Permit. This limit is based on the Massachusetts Surface Water Quality Standards, 314 Code of Massachusetts Regulations ("CMR") 4.05(3)(b)(7), which state: These waters shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an

oily taste to the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life. A concentration of 15 mg/l is recognized as the level at which many oils produce a visible sheen and/or cause and undesirable taste in fish (EPA Water Quality Criteria, 1972). A maximum daily and monthly average limit for oil and grease of 15 mg/l will ensure compliance with state water quality standards and has been included for similar facilities in Massachusetts. This limit is also more stringent than the technology-based ELGs at 40 CFR §463. Pursuant to the ELGs, the mass based limits are calculated by multiplying the APWUF times the concentration based limit (see Attachment C). The Draft Permit limits the maximum daily concentration of oil and grease to 0.0021 lb/day.

#### 6. Temperature and Dissolved Oxygen

The Current Permit contains daily maximum and monthly average temperature limits of 83°F as well as a maximum allowable change in temperature ( $\Delta T$ ) due to the discharge to 5°F. The limits are based on the Massachusetts Surface Water Quality Standards. The Massachusetts Surface Water Quality Standards for Class B warm water fisheries require that the temperature shall not exceed 83°F and that the rise in temperature due to a discharge shall not exceed 5°F in rivers and streams (based on the minimum expected flow for the month). Additionally, the natural seasonal and daily variation shall be maintained and there shall be no change from background conditions that would impair any use designated to this class [314 CMR 4.05 (3)(b)].

Additionally, the Draft Permit contains quarterly monitoring requirements for dissolved oxygen (DO), in order to monitor the effect of the thermal discharge on the receiving water. This requirement is continued from the Current Permit.

#### 7. Total Residual Chlorine (TRC)

The Draft Permit contains a daily maximum TRC limit of 0.019 mg/l and a monthly average limit of 0.011 mg/l. These limits are based on the National Recommended Water Quality Criteria and are continued from the Current Permit. As described in Part B "Permitted Outfalls" above, the Wilton Brook provides no dilution to the discharge, and thus these limits were calculated with no dilution.

## 8. Trichloroethylene and Bis (2-ethylhexyl) phthalate

The Draft Permit contains reporting requirements for trichloroethylene and bis (2-ethylhexyl) phthalate, as continued from the Current Permit. Monitoring for trichloroethylene is based on the 1991 permit application, which indicated the presence of this pollutant in the discharge. Monitoring for bis (2-ethylhexyl) phthalate is based on the type of manufacturing that occurs at this facility. Monitoring for both pollutants was continued in the Current Permit based on Best Professional Judgment. Historic DMRs, presented in Attachment B, show no instances in which these pollutants were present in concentrations above the minimum level of detection. However, based on their toxic nature and potential carcinogenicity, monitoring requirements are maintained in the Draft Permit.

#### 9. Whole Effluent Toxicity

Whole Effluent Toxicity (WET) testing is conducted to determine whether certain effluents, often containing potentially toxic pollutants, are discharged in a combination which produces a toxic amount of pollutants in the receiving water. The toxicity of several constituents in a single effluent can be examined by whole effluent toxicity testing. The Draft Permit requires that the permittee conduct acute and chronic WET testing using the daphnid, <u>Ceriodaphnia dubia</u> (Daphnid), on the contact cooling water discharges once per year, and to meet an LC<sub>50</sub> limit of  $\ge 00\%$  and a C-NOEC (chronic – no observed effect concentration) limit of  $\ge 00\%$ . These limits are continued from the Current Permit, and historical DMR results are presented in Attachment B of the Fact Sheet. Each WET test must be conducted according to EPA Region I protocol as outlined in Attachment A of the Draft Permit.

## 10. Storm Water Pollution Prevention Plan (SWPPP)

This facility engages in activities which could result in the discharge of pollutants to waters of the United States either directly or indirectly through stormwater runoff. These operations include at least one of the following in an area potentially exposed to precipitation or stormwater: material storage, in-facility transfer, material processing, material handling, or loading and unloading. To control the activities/operations, which could contribute pollutants to waters of the United States, potentially violating the State's Water Quality Standards, the Draft Permit requires the facility to develop, implement, and maintain a Stormwater Pollution Prevention Plan (SWPPP) documenting the application of best management practices (BMPs) appropriate for this specific facility (See Sections 304(e) and 402(a)(1) of the CWA and 40 CFR §122.44(k)).

The goal of the SWPPP is to reduce, or prevent, the discharge of pollutants through the stormwater system. The SWPPP serves to document the selection, design and installation of control measures, including BMPs. Additionally, the SWPPP requirements in the Draft Permit are intended to facilitate a systematic approach for the permittee to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. The SWPPP shall be prepared in accordance with good engineering practices and identify potential sources of pollutants, which may reasonably be expected to affect the quality of stormwater discharges associated with industrial activity from the facility. The SWPPP documents the appropriate BMPs implemented or to be implemented at the facility to satisfy the non-numeric technology-based effluent limitations included in the Draft Permit. These non-numeric effluent limitations support, and are equally enforceable as, the numeric effluent limitations included in the Draft Permit.

This process involves the following four main steps:

- (1) Forming a team of qualified facility personnel who will be responsible for developing and updating the SWPPP and assisting the plant manager in its implementation;
- (2) Assessing the potential stormwater pollution sources;

- (3) Selecting and implementing appropriate management practices and controls for these potential pollution sources; and
- (4) Reevaluating, periodically, the effectiveness of the SWPPP in preventing stormwater contamination and in complying with the various terms and conditions of the Draft Permit.

EPA's NPDES Storm Water Multi-Sector General Permit for Industrial Activities (MSGP), issued by EPA on September 29, 2008 includes general best management practices (BMPs) and SWPPP requirements as well as specific requirements for Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries (Sector Y). The, permittee is encouraged to review the SWPPP provisions and Best Management Practices (BMPs), found in Part 5 and Part 8 – Subpart Y of the 2008 MSGP, and incorporate those requirements, to the degree practicable, into the amended SWPPP. Additionally, the Draft Permit requires the permittee to include BMPs for routine cleaning of catch basins and measures to prevent the discharge of plastic pellets and resins.

#### VII. Essential Fish Habitat

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. Sect. 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Service (NMFS) if EPA's action or proposed actions that it funds, permits or undertakes, "may adversely impact any essential fish habitat." 16 U.S.C. Sect. 1855(b). The Amendments broadly define "essential fish habitat" (EFH) as "waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." 16 U.S.C. Sect. 1802(10). Adverse impact means any impact which reduces the quality and/or quantity of EFH. 50 CFR Sect. 600.910(a). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitatwide impacts, including individual, cumulative or synergistic consequences of actions. Essential Fish Habitat is only designated for fish species for which federal Fisheries Management Plans exist. 16 U.S.C. Sect. 1855(b)(1)(A). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999.

A review of the relevant essential fish habitat information provided by NMFS indicates that there are no essential fish habitat designations for the Wilton Brook. Therefore, EPA has determined that the proposed discharge will not adversely impact EFH and that no consultation with NMFS is required. If adverse impacts are detected as a result of this permit action, NMFS will be notified and an EFH consultation will promptly be initiated. A copy of the Draft Permit has been provided to the NMFS for review and comment.

#### VIII. Endangered Species Act

Section 7(a) of the Endangered Species Act of 1973, as amended (ESA) grants authority to and imposes requirements upon Federal agencies regarding endangered or threatened species of fish, wildlife, or plants ("listed species") and habitat of such species that has been designated as critical (a "critical habitat"). The ESA requires every Federal agency, in consultation with and with the assistance of the Secretary of Interior, to insure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical

habitat. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for freshwater species. The National Marine Fisheries Service (NMFS) administers Section 7 consultations for marine species and anadromous fish.

EPA has reviewed the July 31, 2008 listing of federal endangered or threatened species of fish and wildlife for Hampshire County to see if any listed species might potentially be impacted by the re-issuance of this NPDES permit. Based on this review, no federal endangered or threatened species are located in the vicinity of the discharge. Therefore, consultation under Section 7 of the ESA with USFWS is not required. A copy of the Draft Permit and Fact Sheet has been provided to USFWS for review and comment.

#### IX. Monitoring

The permittee is obligated to monitor and report sampling results to EPA and the MassDEP within the time specified within the permit. Timely reporting is essential for the regulatory agencies to expeditiously assess compliance with permit conditions.

#### X. State Certification Requirements

EPA may not issue a permit unless the Commonwealth of Massachusetts Department of Environmental Protection certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Water Quality Standards or unless state certification is waived. The staff of the Commonwealth of Massachusetts Department of Environmental Protection has reviewed the draft permit, and advised EPA that the limitations are adequate to protect water quality. EPA has requested permit certification by the State pursuant to 40 CFR §124.53 and expects that the draft permit will be certified.

# XI. Comment Period, Hearing Requests, and Procedures for Final Decisions

All persons, including applicants, who believe any condition of the Draft Permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period to Jessica Hing, U.S. EPA, Office of Ecosystem Protection, Industrial Permits Branch, 5 Post Office Square – OEP06-04 Boston, Massachusetts 02109-3912. Any person, prior to such date, may submit a request in writing for a public hearing to consider the Draft Permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public meeting may be held if the criteria stated in 40 CFR § 124.12 are satisfied. In reaching a final decision on the Draft Permit, the EPA will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after any public hearings, if such hearings are held, the EPA will issue a Final Permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within 30 days following the notice of the Final Permit decision, any interested person may submit a petition for review of the permit to EPA's Environmental Appeals Board consistent with 40 CFR § 124.19.

## XII. EPA and MassDEP Contacts

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

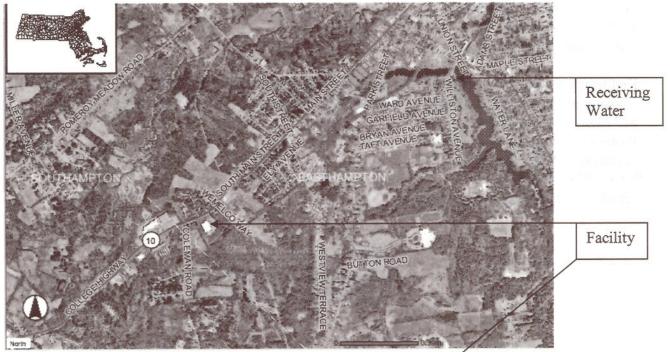
Jessica Hing, EPA New England – Region I 5 Post Office Square – OEP06-04 Boston, MA 02109-3912 Telephone: (617) 918-1560 FAX: (617) 918-0560 Email: <u>hing.jessica@epa.gov</u>

Kathleen Keohane, Massachusetts Department of Environmental Protection Division of Watershed Management, Surface Water Discharge Permit Program 627 Main Street, 2nd Floor Worcester, Massachusetts 01608 Telephone: (508) 767-2856 FAX: (508) 791-4131 Email: <u>kathleen.keohane@state.ma.us</u>

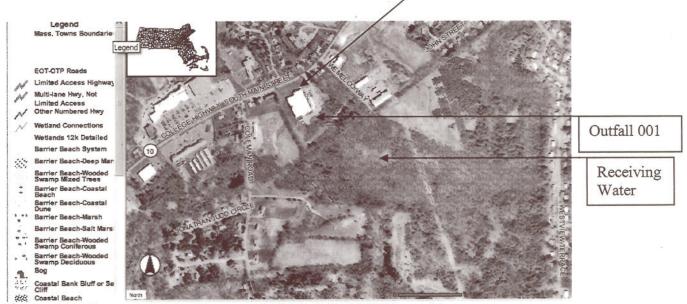
> Stephen S. Perkins, Director Office of Ecosystem Protection U.S. Environmental Protection Agency

Attachment A: Map of Site and Outfall Location

JPS Elastomerics 412 Main St – Route 10 Easthampton, MA 01073



Source: http://maps.massgis.state.ma.us/WETLANDS12K/viewer.htm



Source: http://maps.massgis.state.ma.us/WETLANDS12K/viewer.htm

## ATTACHMENT B JPS Elastomerics (MA0001503) Outfall 001 – Monthly Sampling Results January 2005 THROUGH September 2009

	Flow (gpd)	Temperat	ure (°F)	pH (	s.u.)	TRC (r	ng/l)	-	BOD			TSS		Oil & Grease
MONITORING PERIOD END DATE	Daily Max	Monthly Average	Daily Max	Daily Min	Daily Max	Monthly Average	Daily Max	Monthly Average (lb/day)	Daily Max (lb/day)	Monthly Average (mg/l)	Monthly Average (lb/day)	Daily Max (lb/day)	Monthly Average (mg/l)	Daily Max (mg/l)
1/31/2005	22248	48.47	48.56	6.915	6.94	ND	ND	0	0	ND	1.856	1.856	10	ND
2/28/2005	37017	43.592	45.68	6.68	6.68	ND	ND	0	0	ND	8.958	8.958	29	ND
3/31/2005	12724	43.3	45.1	6.55	6.55	ND	ND	0	0	ND	0	0	ND	ND
4/30/2005	14328	47.15	57	6.97	7.9	ND	ND	0	0	ND	0	0	ND	ND
5/31/2005	6725	56.4	57.4	7.5	7.67	ND	ND	0	0	ND	0	0	ND	ND
6/30/2005	2942	61.65	63.4	7.48	7.74	ND	ND	0	0	ND	0	0	ND	ND
7/31/2005	3843	65.9	66.3	7.38	7.6	ND	ND	0.093	0.093	3	ND	ND	ND	ND
8/31/2005	1715	67.5	68.1	-	-	ND	ND	0.128	0.428	4	ND	ND	ND	ND
9/30/2005	1339	67.1	67.7	7.2	7.56	ND	ND	0.074	1.22	8.07	0	0	ND	ND
10/31/2005	-	-	-	-	-	1	-	-	-		-	2	-	12
11/30/2005	3800	59	59.5	7.26	7.42	ND	ND	0	0	ND	0	0	ND	ND
12/31/2005	10344	47.6	48.2	7.29	7.36	ND	ND	0	0	ND	0	0	ND	3.9
1/31/2006	10347	44.7	46	7.22	7.31	ND	ND	0.0052	0.0052	1.9	0.03	0.03	11	ND
2/28/2006	6822	44.1	44.6	7.21	7.34	ND	ND	0	0	ND	0	0	ND	ND
3/31/2006	2496	44	44.2	7.38	7.39	ND	ND	0	0	ND	0	0	ND	ND
4/30/2006	4000.3	47.8	48.4	7.29	7.45	ND	ND	0	0	ND	0	0	ND	ND
5/31/2006	7572	53.7	53.8	7.19	7.24	ND	ND	0	0	ND	0	0	ND	ND
6/30/2006	5586	57.7	57.7	7.43	7.43	ND	ND	0	0	ND	0	0	ND	ND
7/31/2006	2630	66.4	66.4	6.8	6.96	ND	ND	0	0	ND	0	0	ND	ND
8/31/2006	1377	65.26	65.8	6.8	7.15	ND	ND	0.0639	0.08044	7	0	0	ND	ND
9/30/2006	2128	63.4	64.6	7.12	7.28	ND	ND	0	0	ND	0	0	ND	ND
10/31/2006	2573	62.1	62.2	7.27	7.31	ND	ND	0	0	ND	0	0	ND	ND
11/30/2006	6912	56.4	56.8	7.03	7.47	ND	ND	0	0	ND	0	0	ND	ND
12/31/2006	2679	51.2	51.4	7.61	7.67	ND	ND	0	0	ND	0	0	ND	ND
1/31/2007	4147.2	47	47.84	7.54	7.57	ND	ND	0	0	ND	0	0	ND	ND
2/28/2007	999.3	39.65	41.36	7.67	7.74	ND	ND	0	0	ND	0	0	ND	ND
3/31/2007	12096	48.39	51.1	7.42	7.67	ND	ND	0	0	ND	0	0	ND	6.15
4/30/2007	6963	48.2	48.56	7.46	7.48	ND	ND	0.233	0.233	4	0	0	ND	ND
5/31/2007	2394	55.9	56.2	6.89	7.76	ND	ND	0	0	ND	0	0	ND	ND

100 100

# ATTACHMENT B JPS Elastomerics (MA0001503) Outfall 001 – Monthly Sampling Results January 2005 THROUGH September 2009

	Flow (gpd)	Temperat	ure (°F)	pH (	s.u.)	TRC (n	ng/l)		BOD	ed (		TSS		Oil & Grease
MONITORING PERIOD END DATE	Daily Max	Monthly Average	Daily Max	Daily Min	Daily Max	Monthly Average	Daily Max	Monthly Average (lb/day)	Daily Max (lb/day)	Daily Max (mg/l)	Monthly Average (lb/day)	Daily Max (Ib/day)	Monthly Average (mg/l)	Daily Max (mg/l)
6/30/2007	12269	60.6	60.7	7.22	7.65	ND	ND	0	0	ND	0	0	ND	ND
7/31/2007	2592	63.8	63.9	7.69	7.71	ND	ND	0	0	ND	0	0	ND	ND
8/31/2007	1658	64.8	64.9	7.72	7.72	ND	ND	0	0	ND	0	0	ND	ND
9/30/2007	1150	62.4	62.6	7.3	7.6	ND	ND	0	0	ND	0	0	ND	ND
10/31/2007	1197	60.94	61.88	7.71	7.75	ND	ND	0	0	ND	1.5	1.5	150	7.4
11/30/2007	6429	55.67	55.76	7.25	7.54	ND	ND	0	0	ND	0	0	ND	ND
12/31/2007	8580	51.24	52.1	6.81	7.51	ND	ND	0	0	ND	0.687	0.687	9.6	ND
1/31/2008	4797	46.6	47.6	7.52	7.53	ND	ND	0	0	ND	0	0	ND	ND
2/29/2008	7590	45.1	45.2	7.29	7.66	ND	ND	0	0	ND	0.177	0.177	2.8	ND
3/31/2008	8302	46.4	46.8	7.5	7.59	ND	ND	0	0	ND	0	0	ND	ND
4/30/2008	4061	51.7	52.8	7.46	7.53	ND	ND	0	0	ND	0	0	ND	ND
5/31/2008	3685	57.1	57.8	7.37	7.52	ND	ND	0	0	ND	0	0	ND	ND
6/30/2008	4061	61.9	62.3	7.41	7.59	ND	ND	0	0	ND	0	0	ND	ND
7/31/2008	2990	63.6	63.8	7.49	7.61	ND	ND	0	0	ND	0	0	ND	ND
8/31/2008	6232	66.5	67.6	7.29	7.37	ND	ND	0	0	ND	0	0	ND	ND
9/30/2008	5755	65.84	66.38	7.67	7.9	ND	ND	0	0	ND	0	0	ND	ND
10/31/2008	3585	58.5	58.7	7.58	7.62	ND	ND	0	0	ND	0	0	ND	ND
11/30/2008	6197	56.4	56.4	7.61	7.84	ND	ND	0	0	ND	0	0	ND	ND
12/31/2008	9504	51.6	51.7	7.32	7.39	ND	ND	0	0	ND	0.285	0.285	3.6	ND
1/31/2009	3588	44.6	44.8	7.61	7.62	ND	ND	0	0	ND	0	0	ND	ND
2/28/2009	7776	47.0	47.6	7.5	7.58	ND	ND	0	0	ND	0.364	0.364	5.6	ND
3/31/2009	7228	47.7	47.8	7.48	7.58	ND	ND	0	0	ND	0	0	ND	ND
4/30/2009	4018	51.4	51.7	7.39	7.5	ND	ND	0	0	ND	0	0	ND	ND
5/31/2009	2191	52.7	56.7	7.48	7.57	ND	ND	0	0	ND	0	0	ND	ND
6/30/2009	5260	61.1	61.1	7.31	7.48	ND	ND	0	0	ND	0	0	ND	ND
7/31/2009	10196	65.5	65.8	7.22	7.46	ND	ND	0	0	ND	0	0	ND	ND
8/31/2009	4136	66.5	66.8	7.47	7.58	ND	ND	0	0	ND	0	0	ND	ND
9/30/2009	2656	62.6	63.2	7.68	7.92	ND	ND	0	0	ŇD	0	0	ND	ND

Permit Limits	20000	83	83	6.5	8.3	0.011	0.019	1.5	1.5	18	1.1	1.1	13	15
Minimum	999.3	39.65	41.36	6.55	6.55	ND	ND	0	0	ND	0	0	ND	3.9
Maximum	37017	67.5	68.1	7.72	7.92	ND	ND	0.233	1.22	8.07	8.958	8.958	150	7.4
Average	6186.25	55.24	56.04	7.33	7.50	-	8	0.01	0.04	4.66	0.26	0.26	27.70	5.82
Standard Deviation	5785.18	8.11	7.88	0.27	0.27	-	-	0.04	0.17	2.38	1.25	1.25	50.10	1.77
# Samples	56	56	56	55	55	56	56	56	56	56	56	56	56	56
Limit Exceedences	2	0	0	0	0	0	0	0	0	0	3	3	2	0

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# ATTACHMENT B JPS Elastomerics (MA0001503) Outfall 001 – Quarterly Sampling Results February 2006 THROUGH July 2009

Monitoring Period	Bis(2-ethyhexyl phthalate) (µg/l)	DO (mg/l)	Trichloroethylene (µg/l)		
Feb - Apr 2006	<10	11	<5		
May - July 2006		7	<5		
Aug - Oct 2006	<10	8.5	<5		
Nov 2006 - Jan 2007	-	11	<5		
Feb - Apr 2007	·	10	<5		
May - July 2007		9.3	<5		
Aug - Oct 2007	<10	8.7	<5		
Nov 2007 - Jan 2008	-	11	<5		
Feb - Apr 2008	-	10	<5		
May - July 2008		8.2	<5		
Aug - Oct 2008	<10	8.9	<5		
Nov 2008 - Jan 2009		11	<5		
February - April 2009	<10	9.8	<5		
May-July 2009	-	8.5	<5		

Permit Limits	· NA	NA	NA	
Minimum	ND	7	ND	
Maximum	ND	11	ND	
Average	-	9.49	( <del>-</del>	
Standard Deviation	-	1.26	-	**
# Samples	5	14	14	
Limit Exceedences	NA	NA	NA	

# JPS Elastomerics (MA0001503) Outfall 001 – WET Sampling Results August 2005 through October 2009

Monitoring Period	LC <sub>50</sub>	C-NOEC
August - October 2005	100	50
August - October 2006	100	100
August - October 2007	100	100
August - October 2008	100	100
August - October 2009	100	100
Permit Limits	100	100
Minimum	100	50
Maximum	100	100
Average	100	90.00
Standard Deviation	0	22.36
# Samples	5	5
Limit Exceedences	NA	1

## ATTACHMENT C JPS Elastomerics (MA0001503) Mass Based Limit Calculations

Mass based limits were calculated using the following relationship:

 $L_{M} = L_{C} * Q * 1 pound * 3.785 liters$ 453,592.37 mg 1 gallon

Where:  $L_M$  = Mass Based Limit  $L_C$  = Concentration Based Limit Q = Average Process Water Usage Flow Rate (APWUF) 1 pound = 453,592.37 milligrams 1 gallon = 3.785 liters

And: TSS:  $L_C = 13 \text{ mg/l}$ BOD:  $L_C = 18 \text{ mg/l}$ O&G:  $L_C = 15 \text{ mg/l}$ Q = 16.5 gallons per day (gpd)

<u>TSS</u>

$$\mathbf{L}_{\mathbf{M}} = 13 \left(\frac{mg}{l}\right) * 16.5 \left(\frac{gal}{day}\right) * \left(\frac{1lb}{453592.37mg}\right) * \left(\frac{3.785 liters}{1gallon}\right) = 0.0018 \text{ lb/day}$$

BOD

$$\mathbf{L}_{\mathbf{M}} = 18 \left(\frac{mg}{l}\right) * 16.5 \left(\frac{gal}{day}\right) * \left(\frac{1lb}{453592.37mg}\right) * \left(\frac{3.785 liters}{1gallon}\right) = \mathbf{0.0025} \ \mathbf{lb/day}$$

0&G

$$\mathbf{L}_{\mathbf{M}} = 15 \left(\frac{mg}{l}\right) * 16.5 \left(\frac{gal}{day}\right) * \left(\frac{1lb}{453592.37mg}\right) * \left(\frac{3.785 liters}{1gallon}\right) = 0.0021 \text{ lb/day}$$

# **Response to Comments on draft National Pollutant Discharge Elimination System** (NPDES) for JPS Elastomerics-Stevens Urethane Permit (MA0001503)

## Introduction:

In accordance with the provisions of 40 CFR §124.17, this document presents EPA's responses to comments (RTC) received on the draft NPDES permit for JPS Elastomerics-Stevens Urethane (MA0001503). The RTC explains and supports EPA's determinations that form the basis of the final permit. The draft permit public comment period began June 16, 2010 and ended July 15, 2010. EPA received comments from:

1. Mike Nolen, Plant Engineer, Stevens Urethane, a division of JPS Elastomerics

2. Andrea Donlon, River Steward, Connecticut River Watershed Council, Inc.

EPA's decision-making for this permit has benefited from the comments submitted. The information and arguments did not result in any substantial new changes to the permit. EPA did, however, improve certain requirements as a result of the comments raised. These improvements are summarized below and are reflected in the final permit. The analyses underlying these changes are explained in the responses to individual comments that follow.

- 1. The final permit requires contact cooling water to be sampled at the discharge point to the wetland adjacent to Wilton Brook during dry weather conditions. (See Comment 1)
- 2. The final permit lists units of dissolved oxygen (DO) as mg/L and units of trichloroethylene as ug/L. (See Comment 3)

In addition, EPA included the following typographical corrections in the final permit.

- 3. The numbering of Part I.A. has been corrected.
- 4. Part I.A. Footnote 11 has been deleted because "Composite Sample" is defined in Part II including Standard Conditions.

# **Comments from Mike Nolen, Plant Engineer, JPS Elastomerics:**

# Comment 1:

As we discussed over the phone, I believe some of the changes to the permit from the previous version might be impractical and difficult to implement. My greatest concern is with the sampling of the plant water at the Weir, the Weir is located at the bottom of a pit that is 8 feet deep and is considered a confined space. In order to enter the confined space we alert the fire department as to when we will be entering so that they can send some of their personnel to conduct an air test to make sure the air is breathable. We then have to follow the other confined space procedures and set up barriers, use a harness, and have other personnel monitoring the person climbing into the pit. Since there is little or intermittent flow, we would have to track and try to predict when there would be enough flow to do some sampling. Our previous permit specified taking the sampling at the end of the discharge pipe during dry conditions to reduce the influence from stormwater or groundwater. If possible I was hoping to return to taking the

sampling at the end of the pipe, both during dry conditions and wet conditions. Please let me know your thoughts and if you have any questions.

# **Response to Comment 1:**

EPA acknowledges the safety concerns for sampling contact cooling water at Outfall 001A. Therefore, the final permit has been modified to require contact cooling water from Outfall 001A to be sampled at the discharge point to the wetland adjacent to Wilton Brook during dry weather conditions. The location of Outfall 001A, the same location as that of Outfall 001B, has been identified by the facility as both safe and representative of both discharges.

# Comments from Andrea Donlon, River Steward, Connecticut River Watershed Council, Inc.:

# Comment 2:

The existing permit, dated 2004, established limits for contact and noncontact cooling water from outfall number 001. The draft permit changes the monitoring location for discharges and sets limits on contact cooling water from outfall 001A and establishes wet weather monitoring for discharges of stormwater, uncontaminated air conditioner condensate, and uncontaminated groundwater from outfall 001B. Consequently, the flow limit has changed from a maximum daily of 20,000 gallons per day (gpd) at 001 to 50 gpd at 001A and a quarterly estimate of flow from 001B. There is no maximum daily limit of flow from 001B because it is mostly stormwater, and the multi-sector general permit does not set flow limits on stormwater.

CRWC recommends that the flow from outfalls 001A and 001B be actually measured in some way, not just estimated. We also recommend that outfall 001B flow be measured or estimated more frequently than quarterly. In the past, there was a daily estimate. Now, the volumes are being separated, and it would be useful to have actual flow data from the two outfall locations with better accuracy than on a quarterly basis. Otherwise, the majority of discharge volumes and pollutants from this facility will essentially be invisible compared to the previous version of this permit.

# **Response to Comment 2:**

As explained in the fact sheet, the daily maximum flow limit is 50 GPD at Outfall 001A, which is based on information included in the permittee's application. The permittee reports that 50 GPD is a conservative estimate. Given the low flow and intermittent discharge of contact cooling water through Outfall 001A, estimating flow is an accurate method of measurement.

In addition, the final permit maintains that flow through Outfall 001B will be estimated quarterly. During previous permitting terms, contact and non-contact cooling water flow was measured. Stormwater flow was not measured. Thus, estimating stormwater flow through Outfall 001B at a quarterly frequency as stated in the final permit should provide sufficient information for EPA to evaluate the impact to the Wetland adjacent to Wilton Brook and to necessitate further effluent limitations and monitoring requirements.

# Comment 3:

The existing permit lists dissolved oxygen units as  $\mu g/L$  and trichloroethylene units as mg/L. The draft permit has the units switched. If this is in error, it should be fixed.

## **Response to Comment 3:**

The draft permit lists units for dissolved oxygen (DO) as ug/L and units for trichloroethylene as mg/L. DO is regularly measured in mg/L and trichloroethylene can be measured in ug/L or mg/L. The final permit now contains units of mg/L for DO and ug/L for trichloroethylene, in order for the numeric values of reported trichloroethylene concentrations to be more accurate.

## **Comment 4:**

Part A.1 of the draft permit lists the temperature limit of 83°F. Section A.2.e of the permit states that the rise in receiving water temperature due to the discharge shall not exceed 5°F. However, this limit is not part of the table in Part A.1., so it is not something that the permittee will be measuring or documenting on a regular basis. It remains to be seen how anyone would know if the discharge resulted in a temperature change in the receiving water. CRWC recommends that the temperature difference be added to the table in Part A.1 (with measurements perhaps less frequently than weekly), so that the permittee will have to confirm that there is no negative impact to the receiving stream. After all, this is contact cooling water going to a wetland and there is no dilution.

## **Response to Comment 4:**

The final permit carries forward the expired permit temperature limit of 83°F and states that the change in the receiving water temperature due to the discharge shall not exceed 5°F. The change in temperature has not been added to the table in Part A.1 because, as shown in Attachment B of the fact sheet, the temperature ranged from 39.6°F to 67.1°F and followed natural seasonal variation during the period of January 2005 to September 2009. Furthermore, the volume of contact cooling water discharge is limited (the final permit contains a maximum daily flow limit of 50 GPD) and the majority of discharge from the facility is stormwater. Given the temperature data as well as the low flow of process water that is discharged, the temperature requirements in the draft permit have been carried forward in the final permit. Notably, the final permit maintains the requirement in the draft permit, which states that the permittee shall collect in-stream temperature samples from the receiving water to calculate the rise in temperature upon request requirement contained in the final permit ensure that impact of the discharge to the receiving water is minimized.

# **Comment 5:**

As noted in the fact sheet on page 3, Wilton Brook is listed as impaired in the 2008 Integrated List for non-native aquatic plants and macrophytes. An abundance of nutrients can cause aquatic plants to proliferate. The fact sheet says, "Based on the composition of the discharges from JPS (see Attachment B), the discharge from JPS is not expected to contribute to these impairments."

Attachment B gives a summary of discharge monitoring reports. Since Attachment B has no information on nutrient discharge, it is not clear how EPA can assert that JPS is not expected to

contribute to the impairment based on what was reported in Attachment B. Moreover, we note that the facility has experienced violations of total suspended solids (attachment B), and nutrients such as phosphorus can be associated with TSS. Therefore, we recommend that EPA add quarterly nutrient monitoring to 001A and 001B, at least until it can be confirmed that nutrients are not an issue in the cooling water or the stormwater from this facility (are fertilizers applied to the lawn?).

# **Response to Comment 5:**

The fact sheet states, "The Massachusetts final 2008 303(d) report states that Wilton Brook (MA34-15), from the headwaters in Easthampton, to outlet Rubber Thread Pond (formerly segment MA34105) in Easthampton, is impaired for non-native aquatic plants and aquatic plants (Macrophytes)." More specifically, the 303(d) report states that Wilton Brook is a Massachusetts Category 5 "Water requiring a TMDL" and the Connecticut River Watershed 2003 Water Quality Assessment Report) describes the lower 0.4 mile of Wilton Brook (Segment MA34-15) as impaired for aquatic life use, whereas the upper 0.7 mile of the segment is not yet assessed. The upper 0.7 mile is the receiving water for the discharge from the facility. Therefore, until aquatic life use has been assessed for the upper portion of Wilton Brook, the 303(d) report does indicate the need to monitor for nutrients.

In addition, since April 30, 2005, the permittee has reported all non-detectable concentrations of TSS, with the exception of six detectable values, present in contact cooling water and noncontact cooling water discharged during dry weather conditions during the expired permitting term. Only one of the six detectable values exceeded the expired permit's TSS limits. The final permit already contains stricter mass-based daily maximum and monthly average TSS limits of 0.0018 pounds per day (lb/day). The historically low concentrations of TSS as well as the stricter TSS limits do not necessitate nutrient monitoring.

Last, the permittee estimates that the maximum daily flow at the facility during discharge is 50 GPD. Given the low flow at the facility, which is further diluted by the wetland adjacent to Wilton Brook, as well as the historically low concentrations of TSS as well as the stricter TSS limits, and until aquatic life use has been assessed for the upper portion of Wilton Brook, there is no basis for requiring nutrient monitoring in the final permit.

# **Comment 6:**

Given the previous TSS violations, TSS monitoring of outfall 001B should take place more frequently than once per quarter. Does EPA have reason to believe that the TSS from outfall 001A would have more of an impact than outfall 001B, even though the volume of water is so much less?

# **Response to Comment 6:**

During previous permitting terms, the permittee has not monitored stormwater. Therefore, EPA does not have a basis on which to draw such conclusions about Outfall 001B. Rather, the final permit continues to require TSS concentrations present in contact cooling water from Outfall 001A to be measured monthly. Additionally, compared to the expired permit, the final permit now contains stricter TSS limits for Outfall 001A based on the reduced flow at the facility.

Stricter TSS limits, which are both concentration-based and mass-based, address the low flow reported by the permittee as well as previous TSS violations.

In addition, in contrast to an absence of stormwater monitoring during previous permitting terms, the final permit now requires stormwater, uncontaminated air conditioner condensate and uncontaminated groundwater from Outfall 001B to be reported quarterly. Moreover, the discharge will be regulated by the SWPPP implemented by the permittee

# Comment 7:

No information has been provided in the fact sheet as to the area of land that contributes stormwater to outfall 001B. According to page 7 of the fact sheet, the stormwater contains runoff from roof drains, a parking lot and grassy areas. Empty wooden pallets, scrap metal, and left over rolls of scrap plastic are stored outside and come into contact with stormwater. It is not clear why EPA has not chosen to set limits or require monitoring of other potential effluents in outfall 001B such as E. coli bacteria, metals, or components in plastics. Stormwater from large paved areas can have high bacteria levels (see new requirements for Solutia permit in Springfield).

# **Response to Comment 7:**

The permittee reports that approximately 13% of the total property or 92,000 square feet is impervious area. Monitoring requirements for flow, pH and TSS address the facility's activities on impervious area, which may result in the discharge of pollutants either directly or indirectly through stormwater runoff.

In addition to the above monitoring requirements, EPA is requiring non-numerical effluent limitations for stormwater discharges by requiring the permittee to develop and implement a SWPPP. EPA has issued a memorandum entitled, "Interim Permitting Approach for Water Quality Based Effluent Limitations in Stormwater Permits," dated September 1, 1996. The memorandum explains the rationale being implemented at this facility and includes the following explanation. The Clean Water Act (CWA) does not always require numeric effluent limitations. Section 301 of the CWA requires that discharge permits include effluent limitations necessary to meet state water quality standards. Section 502 defines "effluent limitations" to mean any restriction on quantities, rates and concentrations of constituents discharged from point sources. EPA has through regulation, interpreted the statute to allow non-numerical limitations (e.g., "best management practices" or BMP, see 40 C.F.R. § 122.2) to supplement or replace numeric limitations in specific instances that meet the criteria at 40 C.F.R. § 122.44(k). This regulation essentially codifies a court case addressing stormwater discharges. NRDC v. Costle, 568 F.2d 1369 (D.C. Cir. 1977). In that case, the Court stated that EPA need not establish numeric effluent limitations where such limitations were infeasible.

EPA has defended use of BMPs as a substitute for numeric limitations in litigation involving stormwater discharges (CBE v. EPA, 91-70056 (9th Cir.)(brief on merits)) and in correspondence (Letter from Michael Cook, EPA, to Peter Lehner, NRDC, May 31, 1995). EPA has found that numeric limitations for stormwater permits can be very difficult to develop at this time because of the existing state of knowledge about the intermittent and variable nature of these types of discharges and their effects on receiving waters.

Due to the intermittent and variable nature of these stormwater discharges, EPA has chosen to use BMPs (i.e., the SWPPP) as a non-numeric effluent limit. The BMPs being implemented require the permittee to amend its SWPPP as stated in Section I.B of this final Permit. The SWPPP needs to be developed and implemented within 90 days of the date of this final Permit. The requirements are detailed and extensive. For example, the requirements for the SWPPP include a description of potential pollutant sources, development of stormwater management controls, the formation of a pollution prevention team, development of risk identification and assessment/material inventory list, the development of a preventative maintenance plan, and many other requirements. The development of the SWPPP and the implementation of the plan on site should minimize the release of pollutants to stormwater discharges.

The permittee should realize that management of materials, especially those stored outside, is an important element to meeting the intent of SWPPP. As described in the fact sheet, the "empty wooden pallets, scrap metal, and left over rolls of scrap plastic are stored outside and come into contact with stormwater" need to be addressed in the SWPPP and the permittee is strongly advised to audit the whole facility for potential sources of pollutants that could effect the water quality of the stormwater.

# Comment 8:

It is somewhat archaic that the contact cooling water from the plant, now only 50 gpd, is being discharged with no treatment other than physical separation using a weir (not described in the fact sheet, anyway) into a wetland. We do not understand why the effluent from 001A is not simply discharged to the municipal wastewater treatment plant. According to the fact sheet, the facility is connected to the sewer system. Since the goals of NPDES are to eliminate the discharge of pollutants, CRWC recommends that the facility and EPA consider routing the small amount of wastewater to the municipal treatment plant so that the wetlands and Wilton Brook are not impacted.

# **Response to Comment 8:**

Historical data (see Attachment B of the fact sheet) does not show that contact cooling water discharged from Outfall 001 causes or contributes to a violation of water quality standards nor does EPA believe a continuation of the limits will cause or contribute to a violation in the future. Therefore, requiring the permittee to reroute its wastewater is not necessary during this permitting term, however, this comment and its response may serve as a suggestion to the permittee for doing so.

# **Comment 9:**

*CRWC* supports the requirement of a SWPP, especially one that addresses the discharge of plastic pellets and resins.

# **Response to Comment 9:**

EPA acknowledges the importance of the SWPPP to regulating stormwater. In addition to the SWPPP, the final permit requires effluent limitations and monitoring requirements for stormwater that were not included in the expired permit.